

### AMENDMENTS TO THE CLAIMS

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims in the application.

Please amend claim 19, as follows:

Claims 1-6. (Cancelled)

1           7. (Previously Presented) A helical implant, comprising a core surrounded by helical  
2 threads, with the inclined flanks of said threads bearing a continuum of micro-patterns increasing  
3 exposed surface area of said helical thread, the micro-patterns comprising one or more recesses  
4 and protrusions, and the micro-patterns having continuous and repeated arcuate cross-sectional  
5 outlines throughout the entire length of the micro-patterns, two adjacent said recesses being  
6 separated by a distance on an order of 150  $\mu\text{m}$ .

Claims 8-12. (Cancelled)

1           13. (Previously Presented) A helical implant, comprising a core surrounded by helical  
2 threads bearing inclined flanks disformed with a continuum of micro-patterns increasing exposed  
3 surface area of said implant by extending along said flanks and around said core, with the micro-  
4 patterns comprising one or more recesses and protrusions, and the recesses and protrusions  
5 having substantially identical arcuate cross-sectional outlines throughout the entire length of the  
6 micro-patterns, two adjacent said recesses being separated by a distance on an order of 150  $\mu\text{m}$ .

Claims 14-18. (Cancelled)

1 19. (Currently Amended) A helical implant, comprising:

2 a cylindrical core;

3 a continuous helical screw thread surrounding the cylindrical core, with the helical screw  
4 thread comprising crests, roots and flanks connecting the crests and the bottoms of the helical  
5 screw thread, and the flanks comprising inclined planes surrounding the cylindrical core; and

6 at least one micro-pattern formed on the flanks of the helical screw thread, and extending  
7 helically in a circumferential direction around the cylindrical core, with said micro-pattern  
8 comprising at least one groove and at least one ridge having identical arcuate outlines and  
9 opened at one side when viewed on any cross sectional plane of the helical screw thread, and  
10 said cross sectional plane containing the longitudinal axis of the cylindrical core, the distance  
11 between the neighboring micro-patterns being approximately 150  $\mu\text{m}$ .

Claims 20-24. (Cancelled)